

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-15 (Canceled).

Claim 16 (Currently Amended): An automobile power unit comprising:

an engine;

a motor that transmits a dynamic force to the engine and starts the engine, and that receives a dynamic force of the engine during rotation of the engine and generates a power;

a power conversion circuit that has at least two DC voltage input/output terminals and transmits a power to the motor;

a battery that is connected to the power conversion circuit;

an energy storage source that is connected in series to the battery and stores energy; and

a DC/DC converter that is composed of at least two switching elements, that charges the energy storage source by boosting a voltage of the energy storage source, and that recovers energy in the energy storage source to the battery by lowering a voltage of the energy storage source,

wherein the switching elements of the DC/DC converter connect a high-voltage-side ~~enes-of the DC voltage input/output terminals-terminal~~ of the power conversion circuit to a high-voltage-side terminal of the battery;

wherein when the motor receives a dynamic force of the engine, generates a power, and charges the battery through the power conversion circuit and the DC/DC converter, the switching elements provided in the DC/DC converter are constantly turned on; and

wherein after the engine has been started by the motor and before the power generation is carried out, the DC/DC converter operates the energy storage source in a voltage-lowering manner and recovers energy stored in the energy storage source to the battery.

Claim 17 (Previously Presented): The automobile power unit according to claim 16, wherein the energy storage source is charged during stop, pre-stop idling, or deceleration of the vehicle.

Claim 18 (Previously Presented): The automobile power unit according to claim 16, wherein each of the switching elements of the DC/DC converter is constituted by a semiconductor element.

Claim 19 (Previously Presented): The automobile power unit according to claim 16, wherein each of the switching elements of the DC/DC converter is constituted by a parallel circuit composed of a semiconductor element and a mechanical switch.

Claim 20 (Cancelled).

Claim 21 (Previously Presented): The automobile power unit according to claim 16, wherein the energy storage source is charged from the battery via the DC/DC converter before the engine is started by the motor.

Claims 22-23 (Cancelled).

Claim 24 (Previously Presented): The automobile power unit according to claim 16, wherein the switching element of the DC/DC converter is constituted by a mechanical switch.

Claims 25-26 (Cancelled).

Claim 27 (New): An automobile power unit comprising:

an engine;

a motor that transmits a dynamic force to the engine and starts the engine, and that receives a dynamic force of the engine during rotation of the engine and generates a power;

a power conversion circuit that has at least two DC voltage input/output terminals and transmits a power to the motor;

a battery that is connected to the power conversion circuit;

an energy storage source that is connected in series to the battery and stores energy;

a DC/DC converter that comprises at least two switching elements, that changes the energy storage source by boosting a voltage of the energy storage source; and

a switch connected between a high-voltage-side terminal of the energy storage source and a high-voltage-side of the DC voltage input/output terminal of the power conversion circuit,

wherein the switching elements of the DC/DC converter connect the high-voltage-side of the DC voltage input/output terminal of the power conversion circuit to a high-voltage-side terminal of the battery, and

wherein when the motor receives a dynamic force of the engine, generates a power, and charges the battery through the power conversion circuit and the DC/DC converter, the switching elements provided in the DC/DC converter are constantly turned on and the switch is turned off.

Claim 28 (New): The automobile power unit according to claim 27, wherein the energy storage source is charged during stop, pre-stop idling, or deceleration of the vehicle.

Claim 29 (New): The automobile power unit according to claim 27, wherein each of the switching elements of the DC/DC converter is constituted by a semiconductor element.

Claim 30 (New): The automobile power unit according to claim 27, wherein each of the switching elements of the DC/DC converter is constituted by a parallel circuit composed of a semiconductor element and a mechanical switch.

Claim 31 (New): The automobile power unit according to claim 27, wherein the energy storage source is charged from the battery via the DC/DC converter before the engine is started by the motor.

Claim 32 (New): The automobile power unit according to claim 27,  
wherein energy is supplied from the battery to the power conversion circuit in a first half of a time period in which the engine is started by the motor, and  
wherein energy is supplied from the battery and the energy storage source to the power conversion circuit in a second half of the time period.

Claim 33 (New): The automobile power unit according to claim 27, wherein the switch connected between the high-voltage-side terminal of the energy storage source and the high-voltage-side of the DC voltage input/output terminal of the power conversion circuit is constituted by a semiconductor element.

Claim 34 (New): The automobile power unit according to claim 27, wherein the switching element of the DC/DC converter is constituted by a mechanical switch.

Claim 35 (New): The automobile power unit according to claim 27, wherein the switch connected between the high-voltage-side terminal of the energy storage source and the high-voltage-side of the DC voltage input/output terminal of the power conversion circuit is constituted by a mechanical switch.

Claim 36 (New): An automobile power unit according to claim 27,  
wherein the DC/DC converter further comprises a diode, and  
wherein the diode is disposed in parallel with the switching elements of the DC/DC converter for use when the DC/DC converter charges the energy storage source by boosting a voltage of the energy storage source.

Claim 37 (New): The automobile power unit according to claim 27, wherein each of the switching elements of the DC/DC converter is constituted by a semiconductor element.

Claim 38 (New): The automobile power unit according to claim 27, wherein each of the switching elements of the DC/DC converter is constituted by a mechanical switch.

Claim 39 (New): The automobile power unit according to claim 27, wherein the switch is constituted by a semiconductor element.

Claim 40 (New): The automobile power unit according to claim 27, wherein the switch is constituted by a mechanical switch.